

what is necessary to be acquired by every student of medicine who wishes to have a thorough and exact knowledge of anæsthesia. That this knowledge is not insisted upon by the schools for undergraduate medical students is shown by the every-day history of medical and surgical practice. A single hour in the operating-room of a large hospital would demonstrate the absolute ignorance and gross carelessness of the average junior assistant. If argument were wanting as to the comparative safety of ether or chloroform, the fact that death under anæsthesia is very infrequent in this country would furnish it. It is the duty of the schools to see that no one is graduated unless he has passed a theoretical and practical examination upon this subject. Until this is done the pernicious example of the present will continue to have its influence upon the future house staff. The marked safety of ether has been sufficiently demonstrated so that the anæsthetizer need not feel that it is incumbent upon him to prove that it is extremely difficult to kill a patient while under its influence. This book is not for the undergraduate to read; it is his duty to study it. We wish that this edition had been rewritten instead of being revised, for, as it now stands, it seems uneven. If we were disposed to be critical we might wish that it had been more thoroughly revised and such errors as these eliminated: $\text{NG}-\text{N}_2\text{O}$ (p. 41), and $\text{No}-\text{N}_2\text{O}$ (p. 69) for $\text{NO}-\text{N}_2\text{O}$; $\text{C}_2\text{H}_5\text{Br}$ for $\text{C}_2\text{H}_3\text{Br}$ (p. 227); CINH for $\text{C}_2\text{I}_2\text{NH}$ (p. 468); CH for C_{10}H_8 (p. 485), which, by the way, appears as naphthaline instead of naphthalin; and $\text{C}_{10}\text{H}_7\text{OH}$ for $\text{C}_{10}\text{H}_5\text{OH}$ (p. 489). The paragraph on page 201, devoted to methylic ether, is remarkable for the amount of misinformation which it contains: neither the chemical formula, synonym, nor method of preparation is correct. Vernuil (page 230 and index) and Bandeun (page 442) are new names for old acquaintances, and *soporo*, "meaning natural sleep" (from the Latin), is certainly not of the time of Cicero. And although the author is quoting a circular lauding a nostrum, yet he should have shown that the derivation of the name was misleading equally with the rest of the announcement. While we may not altogether agree with Laborde, we think that the review of his method of lingual traction is unnecessarily severe (page 282). We commend the Student's Summary (page 488 *et seq.*) and the Legal Responsibility of Physicians (page 516 *et seq.*) for their conciseness and practical application. We are pleased to welcome the old friend of our student days and to commend it to the thoughtful student of the present time.

R. W. W.

ATLAS AND ESSENTIALS OF BACTERIOLOGY. By PROF. K. B. LEHMANN, Chief of the Hygienic Institute in Würzburg, and DR. RUDOLF NEUMANN, Assistant in the Hygienic Institute in Würzburg. With 63 chromo-lithographic plates, comprising 558 figures, and numerous engravings. 8vo. pp. viii. 204. New York: William Wood & Co., 1897.

EVERY worker in the vast field of bacteriology is at times confronted by doubt as to the nature of some germ which he may have encountered for the first time. He believes it to be identical in its characters as determined by him with some species of which he may have a description; but a measure of doubt remains, for the complete removal of which

he must have access to a standard culture of the germ in question. Only by careful comparison of the growths obtained by him on the various culture media with those of the standard germ can he in all cases finally determine the identity of his own.

Few, however, are so fortunate as to have access to a collection of bacteria of sufficient size and reliability to meet all requirements of this sort, and to those who have not, the *Atlas of Bacteriology* before us affords the next best resort. Indeed, in many instances the plates contained in it give almost as helpful information of the various biological characters of the germs they represent as do the cultures themselves. This is due in part to the large number of illustrations given of each germ—its growth on gelatin and on agar, both in surface and stab-cultures, on potato and in plates, as well as its minute morphology being given in most cases—but even more to the excellent reproduction of color and relief effects. No artificial representation can be expected to reproduce fully the picture of living cultures, but in the present plates we find an approach thereto almost beyond expectation. This is undoubtedly due to the fact that in the preparation and printing of the plates the greatest care has been exercised in the selection of the colors, no effort having been spared to make the final result approximate the original as nearly as possible. To obtain this we are told that in some instances as many as twenty-one separate and distinct color impressions have been required to produce a single plate.

The volume also comprises a very considerable collection, more or less complete illustration being afforded of about eighty different species, including all those of pathological importance.

Finally, the descriptions of the plates are ample, and are conveniently arranged on pages fronting the plates to which they respectively refer.

While the great usefulness of the volume is in its plates, we must mention also a brief but excellent statement of the general biological characters of the bacteria as a group. This occupies about 100 pages, and is followed by a "Technical Appendix," in which the various methods of studying the bacteria are detailed. An index completes the volume.

J. S. E.

ATLAS OF EXTERNAL DISEASES OF THE EYE. By A. MAITLAND RAMSAY, M.D. With thirty full-page colored plates and eighteen full-page photogravures. Glasgow: James MacLehose & Sons; New York: The Macmillan Company, 1898.

SINCE the publication of the works of Demours, von Ammon, Dalrymple, and Sichel—that is, from 1818 to 1859—there has been little attempt to portray in colors the external diseases of the eye, if we except Salzmann's edition of Jaeger's *Hand-Atlas* and the treatises of Henry E. Juler and George A. Berry, all of which contain a certain number of colored plates descriptive of external ocular disorders. Therefore, it is with much interest that one turns to Haab's *Atlas der Äusseren Erkrankungen des Auges* and Ramsay's *External Diseases of the Eye*, which appear almost simultaneously, as notable contributions to ophthalmic literature.

Although, as announced, Dr. Ramsay's *Atlas* contains thirty full-